Leadership Attributes Valence in Self-Concept and Occupational Self-efficacy

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Abstract

Purpose. The purpose of this study was to explore the relationship between leadership-relevant attributes and occupational self-efficacy in management students. We assumed that leadership-relevant attributes are related to high self-efficacy beliefs.

Design/methodology/approach. In the present study management students from three different countries, namely Germany, Australia, and India, described to what degree they possess task- and person- oriented leadership attributes and indicated their occupational self-efficacy for their future profession. Data were analysed using regression analyses.

Findings. As expected, leadership-relevant attributes were related to occupational self-efficacy. Some support was found for the assumption that ratings of the importance of -relevant attributes moderates the relationship between reported leadership-relevant attributes and occupational self-efficacy but only for task-oriented attributes.

Research limitations/implications. The sample size was small so that comparisons between subgroups were not possible. All data were self-reported.

Practical implications. The results are relevant for career counselling. Looking at self-description of individuals in terms of attributes relevant to their future job rather than working directly on their occupational self-efficacy could be emphasised.

Originality/value. The study provides initial hints at the relationship between self-description and occupational self-efficacy in connection with future managers.

Keywords: Occupational self-efficacy, Leadership attributes, Agency, Communion

Leadership Attributes Valence in Self-Concept and Occupational Self-efficacy

The concept of *self-efficacy* was introduced by Bandura in the 1970s and defined as the "conviction that one can successfully execute the behaviour required to produce certain outcomes" (Bandura, 1977a, p. 193). Self-efficacy is associated with various favourable consequences, particularly on physical and mental health, and congruent with the emphasis of mastery, self-reliance, and achievement in Western cultures (Gecas, 1989). Self-efficacy is developed via several mechanisms; the most important ones are mastery experience and model learning (Bandura, 1977).

Self efficacy has been assessed on different levels of specificity. Originally defined as task-specific (e.g., Bandura, 1977), it has often been conceptualised as domain-specific (e.g., research self-efficacy: Forester, Kahn & Hesson-McInnis, 2004) or general (Sherer et al., 1982; Chen, Gully & Eden, 2001). In terms of the relationship between self-efficacy and outcomes, the level of specificity of the assessment of self-efficacy should depend on the level of specificity of the outcome to be predicted (lens model, see Brunswick, 1955; for a review of this problem with respect to self-efficacy see Gist & Mitchell, 1992). For example, if one wants to predict the performance in a specific task, the level of self-efficacy that needs to be assessed is task specific. If one wants to predict the performance in an occupation (as is the case in our study), level of self-efficacy assessed needs to be broader, that is, domain- rather than task-specific. A recent study by Salanova, Peíro and Schaufeli (2002) showed the value of differentiating between domain- versus general self-efficacy in the case of burnout, indicating that a general assessment of self-efficacy is not specific enough even when predicting relatively broad concepts such as burnout.

Although the concept of self-efficacy originates in clinical psychology, it has been widely applied in the organisational context (e.g., Abele & Spurk, 2009; Berings, Poell, Simons & van Veldhoven, 2007; Garofano & Salas, 2005; Judge & Bono, 2001). Self-efficacy has been shown to play a central role with respect to organisational performance (e.g., meta-analysis by Staijkovic & Luthans, 1998), persistence in a task (e.g., Multon, Brown, & Lent, 1991), as well as the approach of new and challenging tasks (e.g., Sexton & Tuckman, 1991). This shows that self-efficacy can be regarded as resource in organisations. In our study, we are interested to explore self-efficacy during education and thus prior to entering the labour market. The concept in the focus of our study is *occupational self-efficacy* as introduced by Schyns and von Collani (2002). It describes a domain-specific assessment of self-efficacy in the occupational area. We will briefly outline prior research using this concept before going into detail of the relationship between leadership and self-efficacy.

Occupational self-efficacy

Occupational self-efficacy reflects the conviction of a person that he/she can execute behaviours relevant to their own work. Following Schyns and von Collani (2002) occupational self-efficacy is relatively stable due to its correlations to personality characteristics. However, occupational self-efficacy can be assumed as less stable than general self-efficacy, that is, it might be more easily influenced by corresponding experience. It is also broad enough to allow comparison between different types of jobs or professions (Schyns & von Collani, 2002), thus making it useful for investigations in the context of work and organisations. Schyns and von Collani (2002) found first evidence for its usefulness in organisational research and practice as indicated by the positive correlation between occupational self-efficacy and job satisfaction as well as

organisational commitment. Introducing a short version of the occupational self-efficacy instrument, Rigotti, Schyns and Mohr (2008) found positive correlations between occupational self-efficacy and job satisfaction as well as performance in five different countries. Berings et al. (2007) found positive correlations between occupational self-efficacy and some learning styles. In a recent study, Abele and Spurk (2009) found that occupational self-efficacy measured at career entry (with a different instrument as Schyns & Collani, 2002) had a positive impact on salary and status three years later as well as on salary change and career satisfaction seven years later. Thus, already the level of occupational self-efficacy before entering the labour market might be important for future career success.

Leadership and self-efficacy

According to Hannah, Avolio, Luthans and Harms (2008) "effective leadership requires high levels of agency (i.e., deliberately or intentionally exerting positive influence) and confidence" (p. 669). Therefore, self-efficacy is important for becoming a successful leader in the future. The background of this assumption can be found in prior research has shown that self-efficacy is positively related to performance increase (Eden & Ravid, 1982). More importantly for our study, self-efficacy is related to leadership relevant concepts. Since leadership tasks are complex (Mohr, 1999), Schyns and Sanders (2005) argue that executing leadership is related to an increase in self-efficacy. However, the opposite is true as well: De Pater et al. (2009) have shown in a laboratory study that when assessing management potential, self-efficacy is related to the choice of challenging tasks and to the motive to approach success, defined as tendency to chose tasks that show one's capabilities. Given the complexity of the task "leadership" and the fact that leaders are constantly confronted with new tasks, other variables such as

performance adaptability and learning orientation seem relevant to discuss here. Prior research has shown relationships between self-efficacy and these concepts. For example, self-efficacy is positively related to learning orientation (Bell & Kozlowski, 2002). Kozlowski et al. (2001) also showed that self-efficacy is related to performance adaptability, meaning the adaptation of "knowledge and skills to meet the demands of the new situation" (p. 13) as well as "resilience in order to maintain motivation and concentration throughout the session" (p. 13). These prior studies imply that self-efficacy is related to behaviours that are especially relevant for becoming a successful leader in the future. Popper and Mayseless (2007) even regard self-efficacy as one of the building blocks for leader development.

However, in the area of organisational research, most research has focused on the self-efficacy of people already in the job (e.g., Berntson, Näswall & Sverke, 2008; Renkema, Schaap & van Dellen, 2009), or in training for a specific job (Tziner, Fisher, Senior & Weisberg, 2007). Besides the above mentioned study by Abele and Spurk (2009) in which occupational self-efficacy positively predicted salary and status, most studies that examined self-efficacy at career entry focused on *career self-efficacy* (for overviews see Betz, 2007, and Betz & Hackett, 2006). This concept refers to "the degree of confidence in their [the participants'] ability to complete the educational requirements" (Betz & Hackett, 1981, p. 401) for different occupations. Research undertaken by Betz and colleagues (e.g., Betz & Hackett, 1997) investigated how self-efficacy influences career interests (e.g., Betz & Hackett, 1981). Other researchers used self-efficacy to predict career exploration behaviour (Nauta, 2007). These prior studies focus either on the conceptualisation of self-efficacy relevant to education (career self-efficacy) or on outcomes of occupational self-efficacy as outlined above.

In the present research we are interested in self-efficacy for a future profession and its relationship to self-perceptions of attributes, thus going away from the classical assumption that the development of self-efficacy is mainly linked to mastery experience. Thus, we are interested in self-efficacy prior to job experience. Therefore, we examined the relationship between self-perceptions of relevant leadership attributes and occupational self-efficacy among future leaders, that is, management students. We argue that for this group occupational self-efficacy is very important as their (future) work will be characterised, for example, by challenging tasks, learning demands and requirements for performance adaptability, and that people high in occupational self-efficacy will find it easier to achieve such tasks. As this group does not yet have leadership experience, and thus classical sources of self-efficacy such as mastery experience and model learning are less prevalent, the interesting question is in how far other factors such as the perception of possessing attributes relevant to their future job are one important concept in this context. Thus we examined the relationship between self-efficacy for the future job of management students and their self-perceptions of leadership-relevant attributes. So far, the instrument used here to assess occupational self-efficacy has been used in the context of predicting outcomes for people already working in a certain profession but not as a measurement to assess occupational self-efficacy for a future profession. This is, on the one hand, a limitation of our study, on the other hand, it can add to the future use of the instrument if we find meaningful results.

Leadership attributes: Agentic and communal attributes

When it comes to the requirement of success in the area of leadership, specific attributes are discussed, namely *agentic* and *communal qualities* (for an overview see Eagly &

Sczesny, 2008): According to Eagly (1987) communal attributes are stereotypically female. Example comprise: helpful, interpersonally sensitive and nurturing. Agentic attributes, in contrast, are stereotypically male attributes such as aggressive, dominant and independent.

Traditional beliefs about successful leaders contained agentic attributes, that is, successful managers were perceived as being competitive, self-confident, objective, and ambitious (Schein, 2001). In accordance, Abele (2003) found in her prospective study that agency influenced career success in general (and career success influences agency). Other studies have shown that leaders are perceived as more agentic than communal (e.g., Powell, Butterfield, & Parent, 2002; Sczesny, 2005).

However, the concept of successful leadership became somewhat less agentic over time (in comparisons of 1984 and 1999 data from samples of business students; Powell et al., 2002). Nowadays portrayals of managers also embrace communal attributes such as being helpful and supportive (e.g., Senge, 1990). This is supported by Eagly and Carli (2007) who state that despite nowadays leaders are described as having some feminine attributes, masculine attributes "have remained well represented" (p. 91).

These changes in expectations towards the leadership role may explain the popularity of concept such as *transformational leadership* (e.g., Avolio, 1999; Bass, 1998). This concept emphasises establishing oneself as a role model by gaining followers' trust and confidence, thus it incorporates communal qualities along with agentic ones. Many studies and indeed meta-analyses showed that transformational leadership behaviours were positively related to effectiveness (Avolio, Weichun, Koh, & Bhatia, 2004; Bass, Avolio, Jung, & Berson, 2003; Eagly, Johannesen-Schmidt, & van Engen, 2003; Lowe, Kroek & Sivasubramaniam, 1996).

This means that for future leaders it is important to possess both agentic and communal characteristics. We assume that management students are aware of the importance of these attributes and will thus fell more confident about their future job if they perceive themselves as possessing leadership relevant attributes.

H 1: Self-ascribed leadership attributes are positively related to occupational self-efficacy.

Though we assume that possessing attributes relevant to the leadership stereotype in general will influence a person's self-efficacy, it might be that on an individual level, people feel that these attributes are more or less important for them to possess.

Similar assumptions have been made in the context of the Self-Concept Enhancing Tactician model (SCENT; Sedikides & Strube, 1997) in a study by Gaertner, Sedikides and Chang (2008). The Self-Concept Enhancing Tactician model assumes that people strive for self-enhancement and this is often done "indirectly through attempts to self-verify, self-assess, or self-improve (what we call *tactical* self-enhancement)" (Sedikides & Strube, 1997, p. 225). Thus, in our context, people may indicate to possess leadership relevant attributes in order to enhance their self-concept. In their study, Gaertner et al. (1997) asked participants to rate to what extend relative to peers they possess an attribute and how important they find this attribute. They found that a combination of possessing an attribute and rating it as important lead to, for example, higher subjective well-being and satisfaction with life. We assume that a similar combination of possession and importance is positively related to occupational self-efficacy.

Consequently, the perception that one possesses attributes that one personally considers important will influence the person's occupational self-efficacy. Thus, we assume:

H 2: The relationships between self-ascribed leadership attributes and occupational self-efficacy are moderated by the importance ratings of these attributes.

Method

Design and Procedure

The data presented here were part of a larger study (see Sczesny, Bosak, Neff, &Schyns, 2004). Management students were asked to fill in a questionnaire placed it in the context of executive selection. They were asked to estimate in how far they belief themselves to possess task- and person-oriented attributes and how important they believe these attribute to be for themselves. In addition, they were questioned about their occupational self-efficacy for their future job. The questioning took place after lectures. Participation was voluntary. Confidentiality of the data was assured.

Participants

One hundred thirty-six management students from Australia, Germany and India took part in the study. As a prior analysis of this data (Sczesny et al., 2004) did not yield cultural differences, the data were combined for the analyses. The German sample (N = 66; male = 37 and female = 29) was collected at two universities (University of Mannheim and University of Leipzig). Their average age was M = 23.0 (SD = 2.39) years. Of the German participants, 21.5% had completed a training prior to their studies. Of the Australian university students (N = 33; male = 17 and female = 17), 36.4% had

done some sort of training. Their average age was *M* = 20.3 (SD = 2.77) years. In India, 37 university students took part in the study (28 male and 8 female students). Their average age was *M* = 24.1 (SD = 2.98) years. Half of these students had completed some sort of training (50%).

Measures

Self-ascribed leadership attributes. Thirty-four attributes were presented to assess leadership relevant attributes. The selection of the items goes back to a study by Sczesny et al. (2004). The participants rated on a four-point scale in how far they think they possess these skills. Although the general instructions for the questionnaire were placed in the context of executive selection these attributes were not introduced to the participants as leadership attributes. We differentiated two factors, task- and person-oriented attributes (for an overview of the items see appendix). The answer scale ranged from 1 = *no,* 2 = *rather no,* 3 = *rather yes and* 4 = *yes*. The reliability for eighteen task-oriented items was .83. The reliability for sixteen person-oriented items was .78.

Valence of leadership attributes. Participants were asked to rate the same 34 items with respect to how important they find it to possess them on a scale from 0 = not at all *important* to 6 = *extremely important*. The reliability for eighteen task-oriented items was .84. The reliability for sixteen person-oriented items was .79.

Occupational self-efficacy. For the assessment of occupational self-efficacy we presented the participants a short version of the Occupational Self-Efficacy-Scale (OCCSEFF; Schyns & Collani, 2002). Schyns and Collani (2002) showed that occupational self efficacy represents a reliable, one-dimensional construct. Its relationship to personality constructs (general self-efficacy, self-esteem, internal control beliefs, and neuroticism) and to organisational variables (e.g., task demands, leader-

member exchange, job satisfaction, and commitment) shows acceptable construct and criterion validity. The students were asked to indicate how confident they feel with respect to their future profession on a scale from 1 = *applies to me not at all* to 6 = *applies to me completely*. Sample items comprise: "When unexpected problems occur in my work, I don't handle them very well" and "I can remain calm when facing difficulties in my job because I can rely on my abilities". The internal consistency of the scale was Cronbach's $\alpha = .78$.

Table 1 depicts the means, standard deviations and intercorrelations between the variables.

Results

Preliminary analysis

Before testing the hypotheses, we took a closer look at demographic variable: The correlations between *age* and self-efficacy ($r = -.04$, *n.s.*), between age and task-oriented attributes ($r = -.11$, *n.s.*), between age and person-oriented attributes ($r = -.06$, *n.s.*), between age and importance of task-oriented attributes ($r = -.13$, *n.s.*) and between age and importance of person-oriented attributes ($r = -.05$, *n.s.*) were all non-significant.

Over all countries *men and women* did not differ with respect to occupational self-efficacy ($M_{men} = 4.38$ and $M_{women} = 4.39$; t (129) = -0.05, *n.s.*), with respect to task-oriented attributes ($M_{men} = 3.11$ and $M_{women} = 3.11$; t (129) = 0.11, *n.s.*), with respect to importance of task-oriented attributes ($M_{men} = 4.33$ and $M_{women} = 4.45$; t (129) = -1.01, n.s.) or with respect to importance of person-oriented attributes $M_{men} = 4.36$ and $M_{women} = 4.57$; t (126) = -1.84, n.s.), However, men and women differed significantly with

respect to person-oriented attributes (M_{men} = 3.18 and M_{women} = 3.34; t (130) = -2.69, p < .01). Therefore, gender was controlled in some of the analyses.

Over all countries *participants with training and without training* did not differ with respect to occupational self-efficacy ($M_{training}$ = 4.41 and $M_{no\ training}$ = 4.38; t (127) = 0.24, n.s.), with respect to task-oriented attributes ($M_{training}$ = 3.09 and $M_{no\ training}$ = 3.11; t (127) = -0.31, n.s.), with respect person-oriented attributes ($M_{training}$ = 3.22 and $M_{no\ training}$ = 3.26; t (128) = -0.54, n.s.), with respect importance of task-oriented attributes ($M_{training}$ = 4.34 and $M_{no\ training}$ = 4.39; t (127) = -0.44, n.s.), with respect importance of person-oriented attributes ($M_{training}$ = 4.45 and $M_{no\ training}$ = 4.46; t (127) = -0.13, n.s.).

Therefore, the demographic variables were not taken into account when testing the hypotheses.

Hypotheses testing

Our results confirm Hypothesis 1 (Self-ascribed leadership attributes are positively related to occupational self-efficacy). The correlation is positive for both task- and person-oriented attributes (r = .48 and r = .36, respectively). As the correlations seem quite different in size, we conducted a test for the comparison of correlation (Preacher, 2002). However, it showed no significant correlation differences. We also conducted a regression analysis with gender as a control and including both types of leadership attributes. As can be seen from Table 2, both task-oriented and person-oriented attributes were significantly related to occupational self-efficacy, although the latter only on the 10% level.

In order to test Hypothesis 2 (The relationships between self-ascribed leadership attributes and occupational self-efficacy are moderated by the importance ratings of these attributes), we conducted a moderated regression analysis. Following the

recommendations by Aiken and West (1991), the variables in the regression analysis were mean-centred. The interaction between task-oriented attributes and task-oriented attributes (importance) reached significance on the 10% level (see Table 2). Figure 1 indicates that the correlation is higher for high importance, thus lending support to H2 on the 10% level for task-oriented attributes. For person-oriented attributes, the interaction was not significant (see Table 3).

Discussion

Self-efficacy is an important personal resource. It has a strong relationship to career development as could be shown by Betz and colleagues (e.g. Betz, 1994; Betz & Hackett, 1997; Betz & Voyten, 1997). Therefore, the aim of our study was to investigate the occupational self-efficacy of management students with respect to their future jobs. We assumed that self-perceived leadership relevant attributes (task- as well as person-oriented attributes) are an important correlate of occupational self-efficacy for this group. Results indicate a positive relationship between the self-perceived leadership relevant attributes and occupational self-efficacy, for both task- and person-oriented attributes. The effect is slightly higher for task- oriented attributes, though not significantly so. In addition, in terms of the moderating effect of valence, only the effect for task-oriented attributes becomes (marginally) significant. This tendency indicates that although for all students there is a correlation between possessing task-oriented attributes and occupational self-efficacy, this correlation is stronger for students who tend to find task-oriented attributes important. However, the same result did not emerge for person-oriented attributes. Several reasons can be responsible for this tendency (though, this finding has to be replicated in a further study). One could assume that students find these attributes so important that the possession of these attributes is

related to occupational self-efficacy in all cases. However, the importance ratings did not differ much for task- or person-oriented attributes. One assumption is that due to their training in business studies (rather than, e.g., psychology which is more person-oriented), the importance of task-oriented attributes and whether or not they possess these attributes is more salient and leads to the interaction we found.

As outlined in the introduction, prior research has shown that (occupational) self-efficacy is related to positive organisational outcomes, such as job satisfaction (Cohrs, Abele & Dette, 2006; Rigotti et al., 2008) or well-being (Almudever, Croity-Belz & Fraccaroli, 2006). In our research we focused on occupational self-efficacy for a future job and the role of job-relevant attributes. As far as we know this is a new approach to occupational self-efficacy. In future research, it would be important to combine our results with prior studies and examine in how far occupational self-efficacy for a future job can predict, for example, job satisfaction when people have actually started working in the respective job.

Recently, Nauta, van Vianen, van der Heijden, van Dam and Willemsen (2009) found that self-efficacy is related to employability orientation (defined in line with van Dam, 2004, as a person's "receptivity towards employability within their current organization", Nauta et al., 2009, p. 239). Schyns, Torka and Goessling (2007) found that occupational self-efficacy is related to preparedness for change, that is, the desire for a task with higher task demands within or outside the organisation. These studies indicate that for people who already work in an organisation self-efficacy can enhance within or between organisation employability. With respect to occupational self-efficacy for a future job, we would expect a similar result, that is, that occupational self-efficacy for a future job is related to employability.

Implications for career counselling

Given our results for occupational self-efficacy, for career counselling it seems important to have a look at the self-description of individuals in terms of attributes relevant to their future job. Similar approaches are common in career counselling. A model used very often in this context is Holland's (1997; originally published in 1973) approach. Holland uses six personality types (realistic, investigative, artistic, social, enterprising, and conventional) to describe persons. He uses the same characteristics to describe working environments. The match between person and environment is then used to predict, for example, vocational choice and achievement. On the basis of self-ratings, our results imply that a match between person characteristics and characteristics that are important for a certain profession are related to occupational self-efficacy. In contrast to Holland, however, the attributes used in this study are less related to a general environment but more specific to a leadership task. Thus, they could be used to assess people's (subjective) suitability for a leadership position. It may be difficult to improve occupational self-efficacy for someone who has not worked in a certain job. In this case, career counselling might focus (similar to Holland's approach) on analysing and feeding back the degree to which a person possesses relevant attributes. Thus, rather than using mastery experience or model learning, this approach would make use of verbal persuasion in improving occupational self-efficacy (cf. Bandura, 1977). The problem here is, of course, that we assessed the subjective possession of attributes rather than objective attributes of a person. While the subjective possession may be very important to one's self-efficacy, we cannot recommend to exclusively rely on subjective ratings in career counselling. Rather, counsellors need to include objective attributes as well in order to make a good prediction of career success.

For future research into the application of our results into career counselling, it would be interesting to take into account how realistic the self-description of a person is. A more realistic image of a person could be achieved using different sources of description, such as peer-rating, and match them to the self-description. Gathering this information can again be useful in career counselling, for example, when an individual first needs to be made aware that he/she possesses relevant attributes for a particular job.

Limitation and future research

In this study, we only looked at self-descriptions as they are most important for self-efficacy ratings. One limitation is that we used an instrument to assess occupational self-efficacy that has not been established to assess occupational self-efficacy for a future profession. We do not know in how far our instructions were sufficient to trigger the focus on future profession in our participants. Future studies could use a stronger instruction for this instrument. Relatedly, it might be that participants had different professions in mind when responding to the occupational self-efficacy questions. However, one of the features of this instrument is that it can be used to assess occupational self-efficacy for different professions. Therefore, it is not as important for this assessment that participants think of comparable jobs when responding to the questions as it would be for more task-specific measures of self-efficacy.

Although different cultures might influence the sources of self-efficacy (as Hesketh & Rounds, 1995, assume), we did not assume different effects for different cultures as management students even in different countries are part of a very similar subculture. Thus, for the students the demands of their future profession is more important for their occupational self-efficacy than their cultural background. Prior results concerning the

attribution of attributes to leaders in general in these three countries support this assumption: Sczesny et al. (2004) did not find differences between Indian, Australian and German management students with respect to attribution of task- and person-oriented attributes. In all three countries managers in general were assumed to posses more task-oriented than person-oriented attributes. Results of studies focusing on more cultural-specific types of self-efficacy, however, may find different results than we found.

The sample size was quite small for some of the subgroups thus not allowing for comparisons such as a comparison of male and female participants from different countries. Nevertheless the study provides initial hints at the relationship between self-description and occupational self-efficacy. However, it might be valuable to take a closer look on gender as well as on culture in future studies.

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Table 1: Intercorrelations, means and standard deviations

	Mean	SD	1	2	3	4
1) Task-oriented attributes (possession)	3.11	.39				
2) Person-oriented attributes (possession)	3.24	.36	.51**			
3) Task-oriented attributes (importance)	4.38	.68	.54**	.24**		
4) Person-oriented attributes (importance)	4.45	.65	.24**	.62**	.51**	
5) Occupational self-efficacy	4.38	.67	.48**	.36**	45**	.27**

Note: ** $p < .01$

Table 2: Regression analysis explaining occupational self-efficacy via task-oriented and person-oriented attributes

	B	β	R^2 Change
Model 1			.00
Constant	4.39		
Gender	.00	.00	
Model 2			
Constant	1.14		.26***
Gender	-.03	-.02	
Task-oriented attributes	.71	.40***	
Person-oriented attributes	.33	.17†	

Note: *** $p < .001$; † $p < .10$

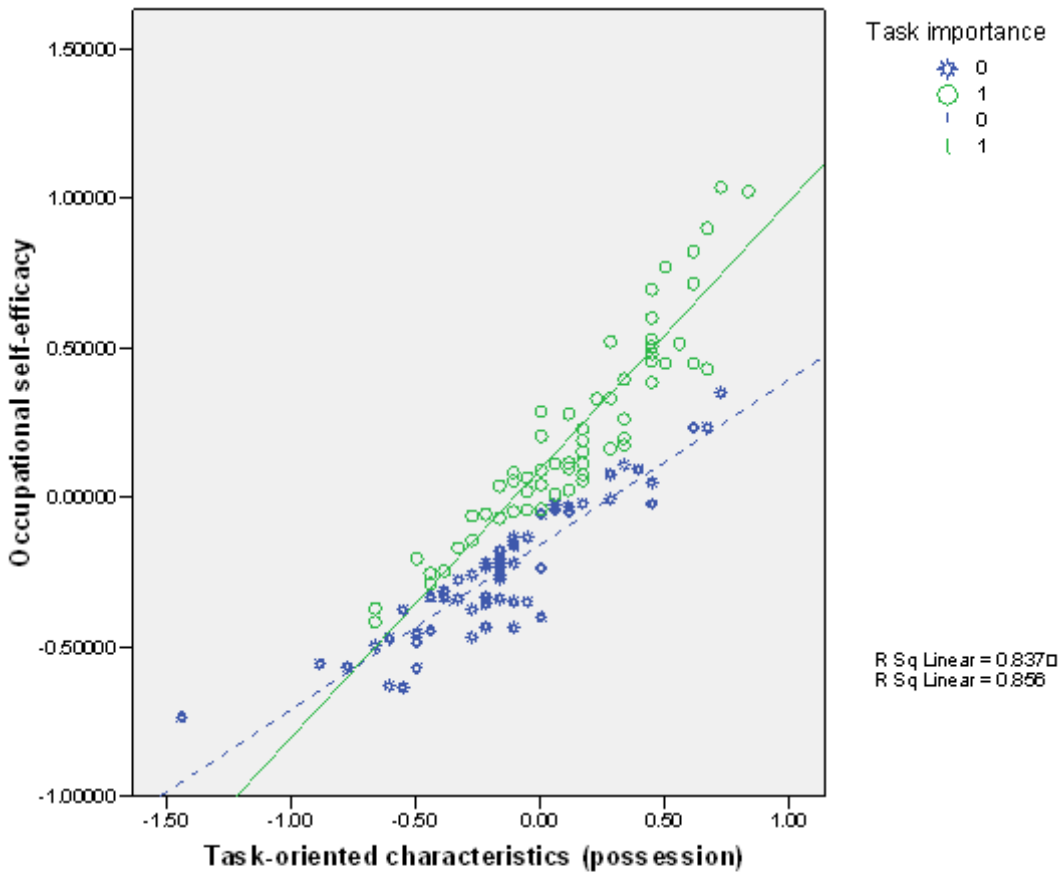
Table 3: Moderated regression analysis explaining occupational self-efficacy via task-oriented attributes

	B	β	R^2
Constant	-.04		.30
Task-oriented attributes	.58	.33***	
Task-oriented attributes (importance)	.29	.30**	
Task-oriented attributes * Task-oriented attributes (importance)	.31	.14†	

Note: *** $p < .001$; ** $p < .005$; † $p < .10$

Table 4: Moderated regression analysis explaining occupational self-efficacy via person-oriented attributes

	B	β	R^2
Constant	0.01		.12
Person-oriented attributes	0.54	.28	
Person -oriented attributes (importance)	0.09	.09	
Person -oriented attributes * person -oriented attributes (importance)	-0.06	-.02	



Note: 0 = low importance, 1 = high importance

Figure 1: Interaction between task-oriented attributes and their importance

Appendix: Items for person-oriented traits and task-oriented attributes (from Sczesny et al., 2004)

Person-oriented traits	Task-oriented traits
dependable	decisive
just	career-oriented
intuitive	effective bargainer
visionary	plans ahead
encouraging	courageous
compassionate	independent
trustworthy	ambitious
confidence-builder	persuasive
communicative	able to cope with stress
diplomatic	dynamic
innovative	hard-working
cooperative	competitive
inspirational	administratively skilled
team-builder	self-confident
honest	rational
motivational	performance-orientated
	assertive
	intelligent